

## The Value of Technical Reviews

WALTER J. MURPHY, Editor

At the opening session of the meeting of the Division of Agricultural and Food Chemistry at the ACS meeting in Kansas City, the chairman commented on the amount of review material which is presented on the symposium programs. He said that it was deemed worth while to review given fields from time to time in order to bring the information up to date and to incorporate ideas and knowledge developed but not previously published.

There is much to be said for review papers of high quality both in meeting programs and in the literature. Research papers are, of course, contributions to basic progress and are the foundation for technical development, but a thorough, sound review which places the material into proper perspective is also a significant contribution.

For example, consider the two symposia on formulation of pesticides and the mechanical and engineering aspects of application, presented at Kansas City. Papers were presented by experts in the field who devote considerable effort to following new ideas and new practical developments. Their background of activity in the field allowed them to present their discussions in such a way as to indicate an evaluation of the ideas discussed and to incorporate the latest material to present the most advanced thinking on their subjects.

Very much the same thinking can be applied with respect to high quality review papers in technical scientific journals. For specific example, consider the review of insecticide synergists presented in Ag and Food, March 17. This is an extensive compilation of available information and a discussion of its significance, the development of which would require a prohibitive amount of time for anyone but a specialist in the field who had been constant in his searching of the literature and incorporation of its new ideas into his organized notes. For the expert in the field who has been diligent in incorporating each new research finding into his collection of knowledge. such a review still should offer different points of view and possibly different conclusions drawn from the consideration of the relationship of the vast amount of knowledge involved.

Sound research must have as a basis a thorough and careful search of the literature. High quality reviews provide a very valuable tool for developing background knowledge for the attack of a new problem. It can reduce considerably the amount of repetition of effort put into literature searches.

Good reviews are desirable and should continue to be significant parts of both meeting programs and publication programs. But very high standards must be set to keep them at a level which will make them real contributions. The effort required for the preparation of an outstanding review is such that we are not likely to have an excess of papers of this kind.

## Agricultural Scientists and the Military

The American Society of Agronomy recently issued a statement urging careful attention to the use of crop and soil scientists in the national defense. A committee appointed by that organization has studied the use of agronomists in World War II and concluded that in many cases scientific training could have been used to better advantage. This, it was concluded, resulted from a failure to recognize scientific talent as a resource of the country and to mobilize available scientific manpower. The suggestion is made that scientists as reservists should not be called into the armed forces without first reviewing their needs in a military capacity. No special privileges are asked. What is asked is that talents and training be used in jobs, either military or civilian where they would be most productive.

The statement points out that food is an essential item of warfare for both armed forces and civilian population. Warfare is wasteful of food and hence more food needs to be produced. Professional crop and soil scientists are needed for accomplishing this increased food production.

We agree on the principle expressed. An important activity of any efficiently run organization is to make the best of available resources. As we have pointed out in the past, scientifically trained men are a very valuable resource. We cannot afford to waste them in any field related to the support of our country's economy and welfare, either peacetime or military.

We have noted in the public press during recent weeks that Russia is preparing vigorously to encourage thousands of youth to take up farming in areas which presently are not satisfactorily productive. Reports indicate that these people are not trained, yet Russia feels that agricultural production is so important it will push even untrained and unpracticed individuals into a mass effort. Surely we should not go in the opposite direction and carelessly use trained agricultural specialists where their talents and training will not be most efficiently used. We support the American Society of Agronomy in their urging the most efficient use of scientifically trained specialists.